



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2002VI5B

Title: Environmental Influences on Cistern Water Quality

Project Type: Research

Focus Categories: Water Quality, Water Supply

Keywords: Cisterns, Bacteria, Coliform

Start Date: 03/01/2002

End Date: 02/28/2003

Federal Funds: \$19,700

Non-Federal Matching Funds: \$0

Congressional District: N/A

Principal Investigator:

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Abstract

The topography in the United States Virgin Islands makes distribution of water through a conventional pipeline distribution system difficult. Homes are required by law to collect rainwater using roof catchments and store the water in large holding chambers. These cisterns are often not properly sealed and are susceptible to contamination from several different sources. Cistern water contamination poses a significant health risk for all consumers. The problems become exacerbated during periods of drought. Low water levels result in higher microbial concentrations and cause adverse short-term health effects, such as diarrhea, cramps, nausea, headaches and other symptoms. Cistern water supplies are not true public water supplies and water quality regulations do not apply. This study will assess risks of contamination of these supplies and assess the quality of water found in these systems. These findings will provide information that will be useful in improving guidelines for the use of these water supply systems.